



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,728	05/03/2005	Rolf Friedrich Philipp Becker	CH 020034	5935

65913	7590	02/08/2008
NXP, B.V.		
NXP INTELLECTUAL PROPERTY DEPARTMENT		
M/S41-SJ		
1109 MCKAY DRIVE		
SAN JOSE, CA 95131		

EXAMINER	
HU, RUI MENG	

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
02/08/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

# Office Action Summary

Application No.

10/533,728

Applicant(s)

BECKER, ROLF FRIEDRICH  
PHILIPP

Examiner

RuiMeng Hu

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 01/17/2008 have been fully considered but they are not persuasive.

Applicant argues that the secondary reference Sakami et al. fail to disclose tuning capacitors for tuning to the transmit frequency.

The examiner respectfully submits that the teaching of a tuning circuit comprising a tunable capacitance diode for tuning to a transmit frequency is well known in the art, i.e. Sakami et al. clearly disclose a tuning circuit 1 carries out the selection of the various radio frequency signals applied from an antenna, wherein the tuning circuit 1 comprising tunable capacitors (variable capacitance diode) for tuning to the transmit frequency (column 1 lines 10-15, 63-68, Abstract, figure 1, tuning circuit 1 comprises a variable capacitance diode).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Sakami et al. into the art of Younis as to include tunable capacitors for tuning to a predetermined broadcasting frequency to receive time data.

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating

obviousness or nonobviousness.

4. **Claims 1-5, 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Younis (US 2002/0168988)** in view of **Miyano et al. (GB 2238438)** and **Sakami et al. (US Patent 4315332)**.

Consider **claim 1**, Younis discloses a mobile radio (figure 5, wireless device 100) comprising a GSM receiving branch (paragraph 27, figure 7, Communications Transceiver branch includes amplifier 152B and BPF 154B), an analog-to-digital converter (figure 7, A/D 168) next in line for converting analog signals into digital signals, a digital signal processor (figure 7, DSP 170) for reconstructing and processing the received signals, a system controller (figure 5, control processor 112) for controlling the components of the mobile radio, a real time circuit (figure 5, local clock w-clock 114), in which a further receiving unit (figure 7, GPS receiving branch includes amplifier 152A and BPF 154A) is arranged for receiving a time reference signal (paragraph 35, GPS time), which further receiving branch comprises an antenna

(figure 7, antenna 150) for receiving time reference signals, an amplifier (figure 7, amplifier 152A) for amplifying the received time reference signal, and a multiplex unit (figure 7, switch 156 is equivalent to a multiplex unit) inserted between the GSM receiving branch and the analog-to-digital converter (figure 7, A/D 168), which multiplex unit (figure 7, switch 156) can be supplied with the received analog mobile radio signal (communication transceiver branch) and the time reference signal (GPS receiving branch) and in which mobile radio the received time reference signal can be applied at a predetermined instant to the digital signal processor (DSP 170) for demodulation and filtering (figure 7) and to the system controller (figure 5, control processor 112, paragraphs 39-40, the control processor 112 is coupled to a timing source W\_CLOCK 114, which maintains a local time for the wireless device 100; the received GPS signal is decoded by the DSP 110; and the DSP 110 and control processor 112 may be implemented as a single processor, a plurality of processors or a combination of processors and dedicated circuitry including application specific integrated circuits (ASICs)) for decoding, and there is provided to update the real-time circuit with the decoded time reference signal (paragraph 35, local clock w-clock 114 is synchronized with GPS time).

Younis shows three different embodiments of the receiving section (figures 5-7), figure 7 shows three receiving branches; each branch amplifies and filters the distinctive received signal, however, the circuitry of figure 7 has one shared receiving unit which comprises a tuning and down converting section (figure 7, elements 158,160,162,164 and 166). In the same reference, Figure 6 shows three different

receiving units (104, 106 and 108), each receiving unit comprises a tuning and down converting section (for example, the receiving unit 104 comprises elements 128A, 126A, 130A, 132A, 134A and 136A for tuning and down converting signal). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique of figure 6 as to modify the circuitry of figure 7 in which to include a tuning and down converting section on every receiving branch instead of using one shared receiving unit, as a result the three different signals could be received and established at the same time, therefore switching and processing time could be reduced.

Younis fails to specifically disclose a real-time circuit comprising an oscillator and a display for displaying information.

In the same field of endeavor, Miyano et al. disclose a real-time circuit comprising an oscillator and a display for displaying information (figure 1, Oscillator 22 and Display 21, claim 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Miyano et al. into the art of Younis as to include an oscillator for driving the local clock (real time clock) and a display unit for displaying current local time.

Younis fails to specifically disclose tunable capacitors for tuning to the transmit frequency.

In the same field of endeavor, Sakami et al. disclose tunable capacitors for tuning to the transmit frequency (column 1 lines 10-15, variable capacitance diode, Abstract, figure 1, tuning unit 1 comprises variable capacitance diode).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Sakami et al. into the art of Younis as to include tunable capacitors for tuning to a predetermined broadcasting frequency to receive time data.

Consider **claim 2 as applied to claim 1**, Younis as modified by Miyano et al. and Sakami et al. discloses characterized in that the multiplex unit can be controlled by the system controller (figure 7, paragraph 45, switch 156 is controlled to select a received signal).

Consider **claim 3 as applied to claim 1**, Younis as modified by Miyano et al. and Sakami et al. discloses characterized in that the tunable capacitance can be set by the system controller (Sakami et al., Abstract, tuning to receive more than two preset broadcasting stations).

Younis as modified by Miyano et al. and Sakami et al. fails to disclose that the gain factor of the amplifier can be set by the system controller.

Official Notice is taken that the teaching of amplifier gain control in a radio receiver is well known in the art, therefore a person skilled in the art would easily include the teaching of amplifier gain control as to control the signal level for a better processing.

Consider **claim 4 as applied to claim 1**, Younis as modified by Miyano et al. and Sakami et al. discloses characterized in that the real-time circuit can be updated by the system controller (Younis, local clock w-clock 114 is synchronized with GPS time; Miyano et al., figure 1, clock 19d is updated by the CPU 19c).

Consider **claim 5 as applied to claim 1**, Younis as modified by Miyano et al. and Sakami et al. discloses characterized in that the updating distance can be chosen at will or is fixedly programmed (Miyano et al., page 6 lines 11-14).

Consider **claim 7 as applied to claim 1**, Younis as modified by Miyano et al. and Sakami et al. discloses characterized in that the receiving unit is a receiving unit for frequency-modulated signals (Miyano et al., page 2, RDS of FM broadcast signal).

• **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Younis (US 2002/0168988)** as modified by **Miyano et al. (GB 2238438)** and **Sakami et al. (US Patent 4315332)** in view of **Eynothern et al. (DE 19536580)**.

Consider **claim 6 as applied to claim 1**, Younis as modified by Miyano et al. and Sakami et al. fails to disclose characterized in that the further receiving unit is a receiving unit for amplitude-modulated signals.

In the same field of endeavor, Eynothern et al. disclose receiving time data using amplitude-modulated signals (figure 2, time indication signal DCF77, the DCF77 in the medium wave frequency range (in the AM range)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Eynothern



et al. into the art of Younis as modified by Miyano et al. and Sakami et al. as to include a receiving unit for receiving amplitude modulated signals as an alternative.

Claims 8-11 are cancelled.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street

Application/Control Number:  
10/533,728  
Art Unit: 2618

Page 9


Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RuiMeng Hu  
R.H./rh  
January 31, 2008

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2618